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# Ornithological Profile from Iceland to Antarctica

par - door

W. LOY

* * *

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# Ornithological Profile from Iceland to Antarctica

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W. LOY

# ORNITHOLOGICAL PROFILE FROM ICELAND TO ANTARCTICA

## by W. LOY (*)

(M. S. received 15.VIII.1961)

A voyage has several disavantages for a thorough study of sea-birds : there are the movements of the boat itself and the fact that one never can stay at the same place. Although some interesting observations can be made, they will always be incomplete. I will present some data which are the results of a voyage starting in south-east Icelandic waters (65° N.-L.) extinding over the part of the North-Atlantic Ocean up to North Scotland, the North Sea, the Channel, the Bay of Biscay, the Atlantic Ocean along the shortest way to Capetown and finally doming over the Antarctic continent, more especially the King Baudouin Base (70°20' S., 24°20' E.). I shall only treat the appearance of some birds, for the circumstances did not allow me further study. I made the first part up to Iceland, during the month of August 1958, the second part to Antarctica was done from November 1959 up to March 1960. Both periods happened to fall in a summer-period, the first one during the summer in the northern hemisphere, the second during the summer of the southern hemisphere.

The penguins, which we observed on the pack and on the ice-shelf (Emperor and Adélie) will not be further described.

The first ones which will be considered are the gulls and skuas, exception made of all those species which can always be seen in the immediate proximity of the shore ; we can mention the British Lesser Black-backed Gull (*Larus fuscus*) that we perceived on the following places ; 19°09' N, 17°53' W. (3.III.1960 — 15 ex.); 24°40' N., 16°23' W. (4.III.1960 — 10 ex.); 28° N., 15°30' W. (Gran Canario 50 ex.); 30°01 N., 14°24' W (5.III.1960 — 7 ex.) and near the South-African coast 33°48' S., 18°24' E. (13.XII.1959).

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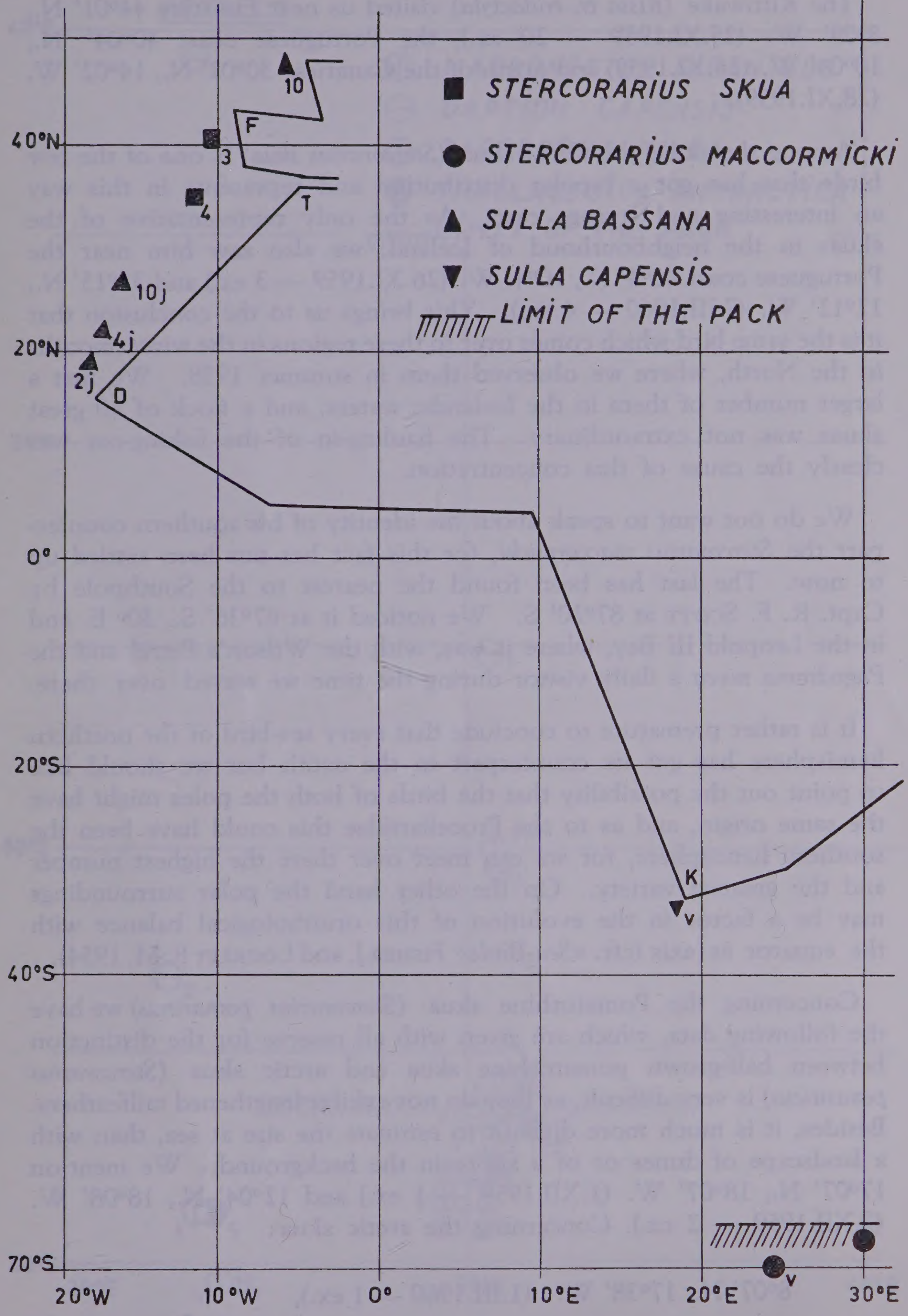
(*) Opération Iris 1960, Centre national de Recherches polaires; Expédition Antarctique Belge 1960 : Leader G. Derom.



j = young birds
v = several flights

Fig. 1

The Kittiwake (*Rissa tr. tridactyla*) visited us near Finistère 44°01' N., 8°09' W. (25.XI.1959 — 20 ex.), the Portuguese coast 40°04' N., 10°04' W. (26.XI.1959) and north of the Canaries 30°02' N., 14°02' W. (28.XI.1959).

Among the skuas the Great skua (*Stercorarius skua*) is one of the few birds that has got a bipolar distribution and represents in this way an interesting and strange case. As the only representative of the skuas in the neighbourhoud of Iceland, we also saw him near the Portuguese coast 40°4' N., 10°4' W. (26.XI.1959 — 3 ex.) and 35°15' N., 12°12' W. (7.III.1960 — 4 ex.). This brings us to the conclusion that it is the same bird which comes over to these regions in the wintermonths in the North, where we observed them in summer 1958. We met a larger number of them in the Icelandic waters, and a flock of 40 great skuas was not extraordinary. The hauling-in of the fishing-net was clearly the cause of this concentration.

We do not want to speak about the identity of his southern counterpart the *Stercorarius maccormicki*, for this fact has not been settled up to now. The last has been found the nearest to the Southpole by Capt. R. F. Scott at 87°20' S. We noticed it at 67°36' S., 30° E. and in the Leopold III Bay, where it was, with the Wilson's Petrel and the *Pagodroma nivea* a daily visitor during the time we stayed over there.

It is rather premature to conclude that every sea-bird of the northern hemisphere has got its counterpart in the south but we should like to point out the possibility that the birds of both the poles might have the same origin, and as to the Procellariidae this could have been the southern hemisphere, for we can meet over there the highest number and the greatest variety. On the other hand the polar surroundings may be a factor in the evolution of this ornithological balance with the equator as axis (cfr. «*Sea-Birds*» Fisher J. and Lockley R.M. 1954).

Concerning the Pomatorhine skua (*Stercorarius pomarinus*) we have the following data, which are given with all reserve for the distinction between half-grown pomatorhine skua and arctic skua (*Stercorarius parasiticus*) is very difficult, as they do not exhibit lengthened tailfeathers. Besides, it is much more difficult to estimate the size at sea, than with a landscape of dunes or of a shore in the background. We mention 17°07' N., 18°07' W. (1.XII.1959 — 1 ex.) and 12°04' N., 18°08' W. (2.XII.1959 — 2 ex.). Concerning the arctic skua:

| | |
|---|---|
| 8°07' N., 17°38' W. | (1.III.1960 — 1 ex.), |
| 13°27' N., 17°48' W. | (2.III.1960 — 6 ex), |

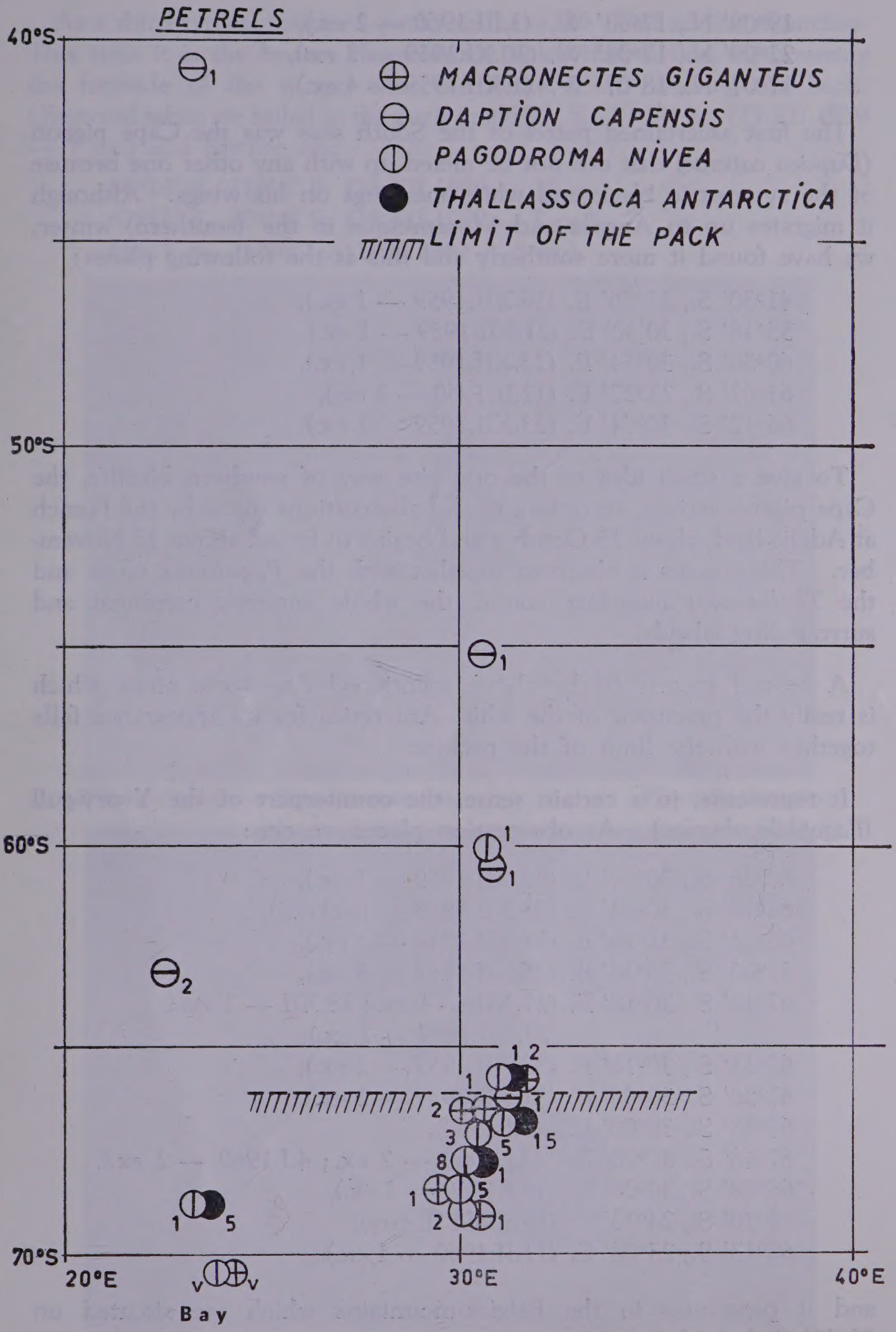

PETRELS
⊕ MACRONECTES GIGANTEUS
⊖ DAPTION CAPENSIS
⦶ PAGODROMA NIVEA
● THALLASSOICA ANTARCTICA
LIMIT OF THE PACK
40°S
50°S
60°S
70°S
20°E
30°E
40°E
Bay

Fig. 2

19°09' N., 17°53' W. (3.III.1960 — 2 ex.),
22°09' N., 17°02' W. (30.XI.1959 — 2 ex.),
17°07' N., 18°07' W. (1.XII.1959 — 4 ex.).

The first ascertained petrel of the South seas was the Cape pigeon (*Daption capense*) that can not be mixed up with any other one because of the symmetric black and white markings on his wings. Although it migrates up to Angola and Mozambique in the (southern) winter, we have found it more southerly and this at the following places:

41°30' S., 23°06' E. (18.XII.1959 — 1 ex.),
55°18' S., 30'30' E. (21.XII.1959 — 1 ex.),
60°36' S., 30°54' E. (22.XII.1959 — 1 ex.),
63°02' S., 22°27' E. (12.II.1960 — 2 ex.),
66°12' S., 30°54' E. (23.XII.1959 — 1 ex.).

To give a small idea of the opposite way of southern birdlife, the Cape pigeon arrives, according to the observations made by the French at Adelie-land, about 15 October and begins to brood about 25 November. This species is observed together with the *Pagodroma nivea* and the *Thallassoïca antarctica* round the whole antarctic continent and surrounding islands.

A second species is the above mentioned *Pagodroma nivea* which is really the precursor of the white Antarctica for its appearance falls together with the limit of the packice.

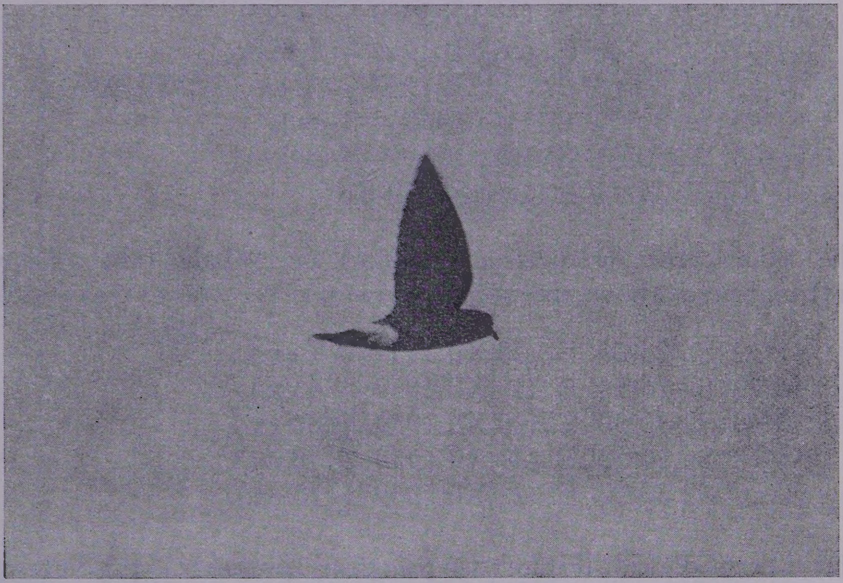
It represents, in a certain sense, the counterpart of the Yvory-gull (*Pagophila eburnea*). As observation places we cite:

60°36' S., 30°54' E. (22.XII.1959 — 1 ex.),
66°12' S., 30°54' E. (23.XII.1959 — pack-ice),
66°24' S., 31°18' E. (24.XII.1959 — 5 ex.),
67°00' S., 30°36' E. (25.XII.1959 — 3 ex.),
67°12' S., 30°18' E. (27.XII — 1 ex.; 28.XII — 2 ex.;
29.XII.1959 — 2 ex.),
67°24' S., 30°18' E. (30.XII.1959 — 2 ex.),
67°36' S., 30°00' E. (31.XII.1959 — 1 ex.),
67°48' S., 30°00' E. (2.I.1960),
67°48' S., 30°00' E. (3.I.1960 — 2 ex.; 4.I.1960 — 2 ex.),
68°08' S., 30°08' E. (8.I.1960 — 2 ex.),
70°20' S., 24°13' E. (Leopold III-bay),
68°13' S., 23°08' E. (11.II.1960 — 1 ex.).

and it penetrates in the Belgica-mountains which are situated on 72°30' S. latitude.

As a third typical southern petrel we have the *Thallassoïca antarctica.* This time it is the brown characteristic color that strikes us, covering the foreside of the wings, with the white color covering the back. Observed when we sailed in the pack on 66°12' S., 30°54' E. (23.XII.1959 — 1 ex.) and further on:

66°24' S., 31°18' E. (24.XII.1959 — 15 ex.),
67°12' S., 30°18' E. (28.XII.1959 — 1 ex.),
68°13' S., 23°08' E. (11.II.1960 — 5 ex.).



Wilson's petrel — *Oceanites oceanicus.* Photo F. Closset.

Giant Fulmar — *Macronectes giganteus.* Photo F. Closset.

The Giant Fulmar (*Macronectes giganteus*) has a peculiar and heavy appearance upon this packice, with the behaviour of a cormorant. This bird of prey could quickly be determined by the fact that he was preying upon carrion, a dead seal, and thus observed at a short distance. Althought the white variety (M. *gig. albus*) is mentioned as predominent as one goes south, neverhteless we never could affirm it, neither could the French expeditions. We found the brown variety at following places:

66°12’ S., 30°54’ E. (23.XII.1959 — 2 ex.),
67°00’ S., 30°36’ E. (26.XII.1959 — 1 ex.),
67°12’ S., 30°18’ E. (28.XII.1959 — 1 ex., 29.XII.1959 — 1 ex.),
67°48’ S., 30°00’ E. (4.I.1960 — 1 ex.),
68°08’ S., 30°08’ E. (8.I.1960 — 1 ex.),
70°20’ S., 24°13’ E. (Leopold III-bay).

The Blue petrel (*Halobaena caerulea*) or Whale bird (*Pachyptila vittata*) appeared above the ship’s wake at:

41°30’ S., 23°06’ E. (18.XII.1959 — 1 ex.),
46°00’ S., 26°54’ E. (19.XII.1959 — 4 ex.),
50°48’ S., 30°30’ E. (20.XII.1959 ± 50 ex.),
55°18’ S., 30°30’ E. (21.XII.1959 ± 70 ex.),
60°36’ S., 30°54’ E. (22.XII.1959 ± 70 ex.).

The Storm—Petrel (*Hydrobates pelagicus*) presents a problem and a further study merits a recommendation, for this small brown bird always stayed at a respectable distance so that we have to leave a note of interrogation after the name of *Hydrobates pelagicus*, observed at:

47°04’ N., 6°02’ W. (24.XI.1959 — 2 ex.),
22°09’ N., 17°02’ W. (30.XI.1959 — 4 ex.),
17°07’ N., 18°07’ W. (1.XII.1959 — 15 ex.),
12°04’ N., 18°08’ W. (2.XII.1959 — 3 ex.),
7°07’ N., 16°06’ W. (3.XII.1959 — 2 ex.).

We localized the Wilson’s petrel (*Oceanites oceanicus*), more distinct and more close by, at:

66°12’ S., 30°54’ E. (23.XII.1959 — 1 ex.),
67°00’ S., 30°36’ E. (25.XII.1959 — 1 ex.),
67°12’ S., 30°18’ E. (27.XII — 2 ex.; 28.12.1959 — 2 ex.),
67°48’ S., 30°00’ E. (2.I.1960 — 1 ex.),
68°08’ S., 30°08’ E. (8.I.1960 — 1 ex.).
70°20’ S., 24°13’ E. (Leopold III-bay).

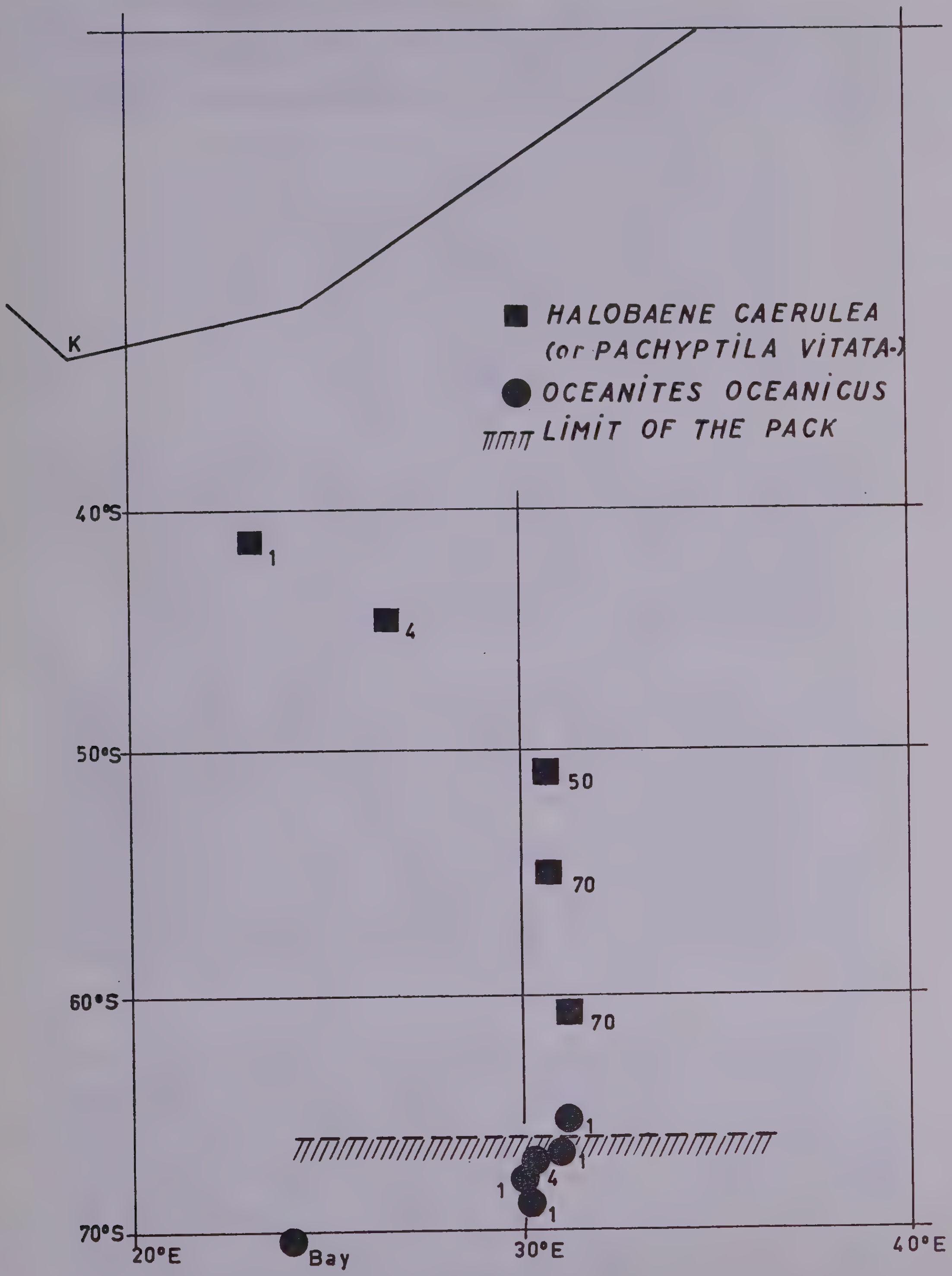

K
■ HALOBAENE CAERULEA
(or PACHYPTILA VITATA-)
● OCEANITES OCEANICUS
ΠΠΠ LIMIT OF THE PACK
40°S
50°S
60°S
70°S
20°E
30°E
40°E
1
4
50
70
70
1
1
4
1
1
Bay

Fig. 3

Concerning the albatrosses we saw, with some reserve as I was quite inexperienced in this domain, a first kind namely *Thallassarche cauta atlantica* (21°18’ S., 6°48’ E., 10.XII.1959 — 1 ex.). With more certainty we mention the *Diomeda exulans* or Wandering albatross at following places:

29°49’ S., 14°21’ E. (12.XII.1959 — 4 ex.),
36°54’ S., 20°00’ E. (17.XII.1959 — 20 ex.),
41°30’ S., 23°06’ E. (18.XII.1959 — 10 ex.),
46°00’ S., 26°54’ E. (19.XII.1959 — 2 ex.),
50°48’ S., 30°30’ E. (20.XII.1959 — 3 ex.),
42°00’ S., 19°24’ E. (17.II.1960 — 1 ex.),
36°57’ S., 19°27’ E. (18.II.1960 — 7 ex.),
28°22’ S., 13°22’ E. (22.II.1960 — 1 ex.),

and without doubt the *Phoebetria fusca* or Sooty albatross, with the characteristic white half-ring around his eye, at:

55°18’ S., 30°30’ E. (21.XII.1959 — 1 ex.),
60°36’ S., 30°54’ E. (22.XII.1959 — 2 ex.),
66°12’ S., 30°54’ E. (23.XII.1959 — 2 ex.).

When we admire the glide of the gulls along the dunes then we ought to be astonished at the ability of gliding of these South sea-birds. They pass the boat without striking a blow, counting upon and tacking about a strong western wind. One recalls that seamen made tabacco-pouches out of the legs which points to the fact they are not strong on their legs, as is correct of all true seabird. A special study could be undertaken about the evolution of the nosetubes. There is indeed a transition to note from the albatrosses, with rather insignificant nosetubes, to the *Pagodroma nivea* where these organs form an integral part of the bill.

In the Bay of Biscay the Northern-Gannet (*Sulla bassana*) betray their presence by a graceful flight, also observed off the coast of Scotland in the month of August 1958. On 22°09’ N., 17°02’ W. we met 4 young Gannets (30.XI.1959) which confirms the general rule that young Gannets show a tendency to migrate further southward than the older ones. The former remain near the coast of Marocco and Senegal while the latter scarcely come to the latitude of Gibraltar. We ascertain the analogous case in North America, where they breed on Newfoundland and the Gulf of St Laurence but in winter fly to Mexican Bay.

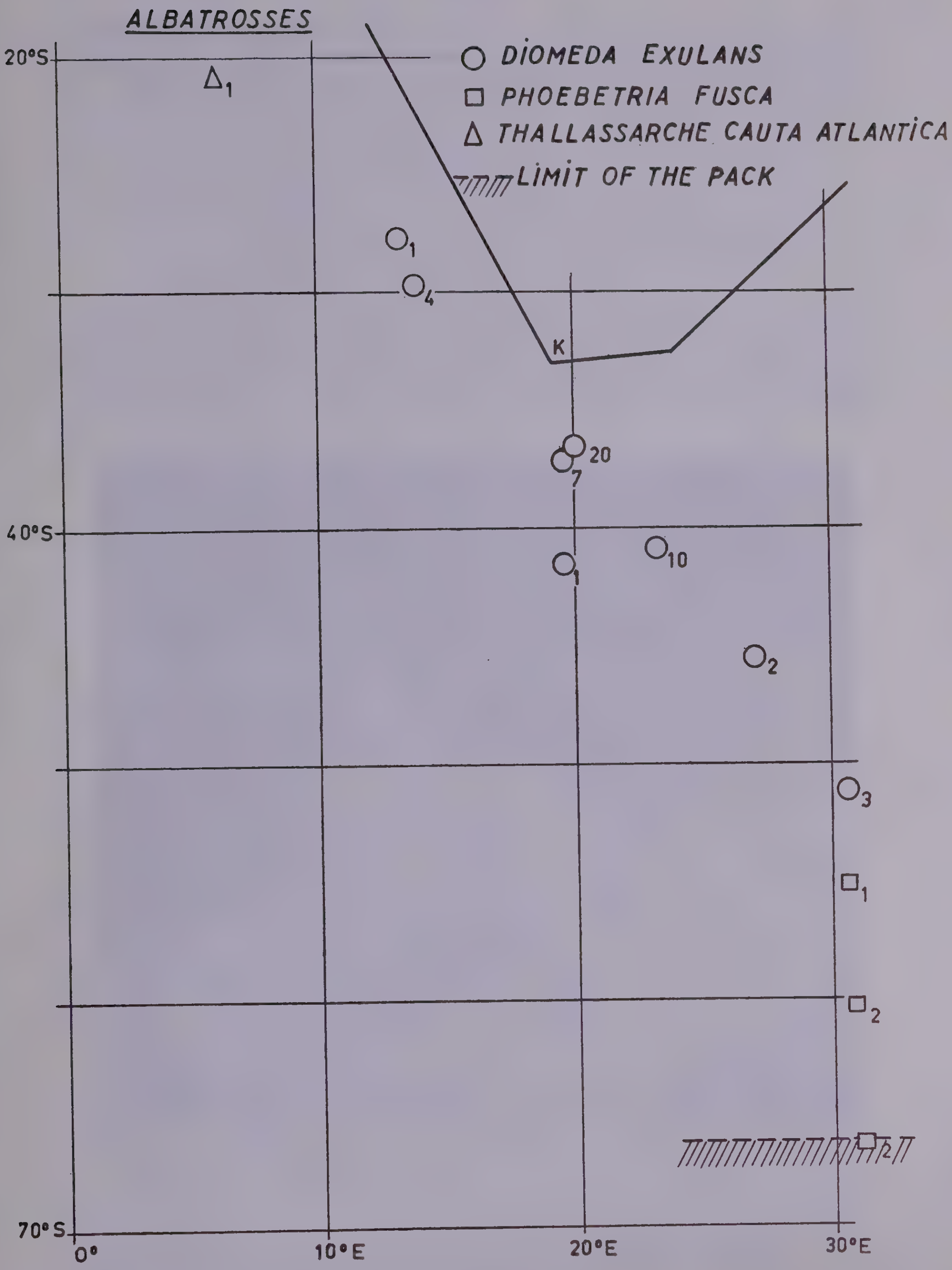
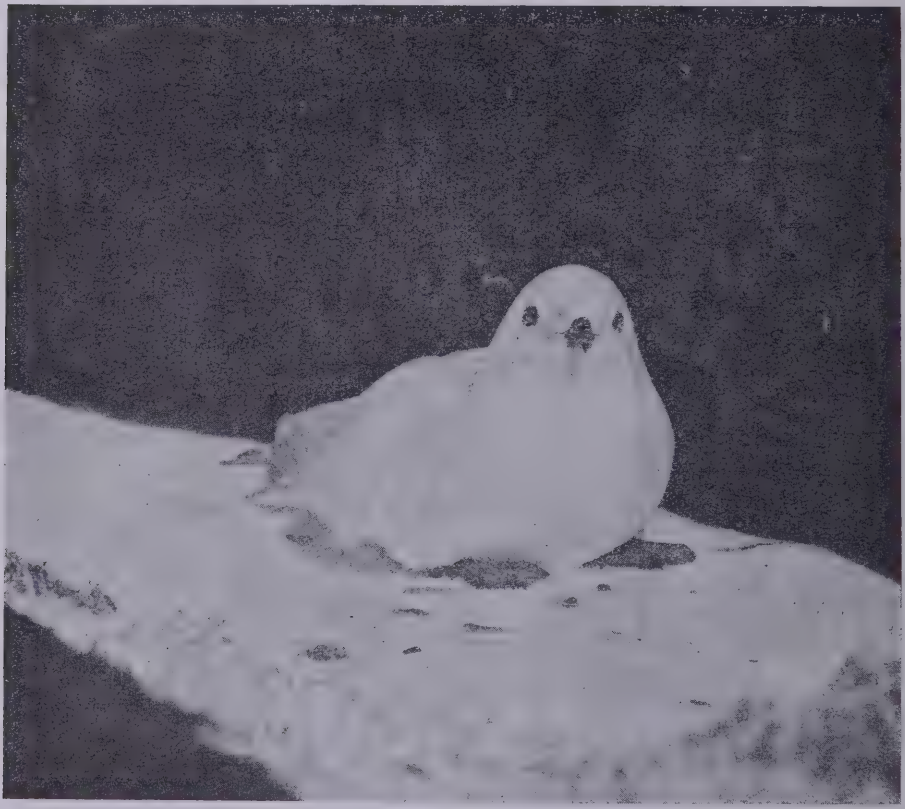

ALBATROSSES
○ DIOMEDA EXULANS
□ PHOEBETRIA FUSCA
△ THALLASSARCHE CAUTA ATLANTICA
LIMIT OF THE PACK
20°S
40°S
70°S
0°
10°E
20°E
30°E
K
1
4
20
7
1
10
2
3
1
2
2

Fig. 4

A similar migration exists with the Cape Gannet (*Sula capensis*), which breeds in the Lambertsbay about 120 miles north of Capetown and observed at 33°48' S., 18°24' E. (13.XII.1959 several flights). In the northern hemisphere we saw the gannet at:

47°04' N., 6°02' W. (24.XI.1959 — 10 ex.),
22°09' N., 17°02' W. (30.XI.1959 — 4 young ex.),
19°09' N., 17°53' W. (3.III.1960 — 2 young ex.),
24°40' N., 16°23' W. (4.III.1960 — 10 young ex.).

We did not find in the south the Alcidae nor the southern Puffin (*Fratercula*), seen between Scotland and the Shetlands, but we can report upon the presence of a penguin near the coast of the Cape viz: *Spheniscus demersus*.



*Pagodroma nivea* GMELIN. Photo T. VAN AUTENBOER.

Some observations of birds in the Sôr-Rondane Mountains 200 km S. of King Baudouin Base are given by T. VAN AUTENBOER : «Snow-petrels (*Pagodroma nivea*) are by far the most frequently observed birds.

We saw them as early as 12 Oktober, while eggs were found the 6 December at Pinvinane in 1959 and the 7 December at Menipa in 1961. Petrel rookeries totalling sometimes several hundreds of birds can be seen at several of the Pinvinane bluff's, Otto Borchgrevink fjellet, Mefjell, Menipa and Lunckeryggen. Small quantities of guano can be found in these rookeries, which seem to be established preferentially on granitic rocks.

All the rookeries observed lie in the western part of the range which is more protected from the main S.-E.-wind.

A few skuas (*Stercorarius Maccormicki*) are usually seen around the rookeries feeding on petrels. Some skua-chicks were found in the beginning January near Vikinghögda. A Wilson's petrel (*Oceanites oceanicus*) was seen at the Gunnestadbreen and a few Antarctic petrels *(Thallassoïca antarctica)* around Teltet.»

While there is some doubt as to the correctness of their identifications I would like to mention the following:

— the *Fulmar Shearwater*,
— *Puffinus bühlii* (near Capetown),
— *Pterodroma* 46°29' S., 20°11' E — 16.II.1960,
    42°00' S., 19°24' E. — 17.II.1960,
— *Fregetta* 36°57' S., 19°27' E. — 18.II.1960,
— *Priocella antarctica* (Leopold III-bay),
— *Thallassarche melanophris* 46°29' S., 20°11' E. — 16.II.1960.

Although the Silvergrey petrel (*Priocella*) should be the southern counterpart of the Fulmar Petrel (*Fulmarus gl. glacialis*) (cfr. W. ALEXANDER), the latter is much more frequently observed as ever-present and only open-sea bird between Scotland and Iceland.

In the hope that I can continue these observations, I close with my heartfelt thanks to Messrs. F. CLOSSET, L. DILLEN and R. PAUL who, by discussion and technique, have enriched this communication.

## REFERENCES

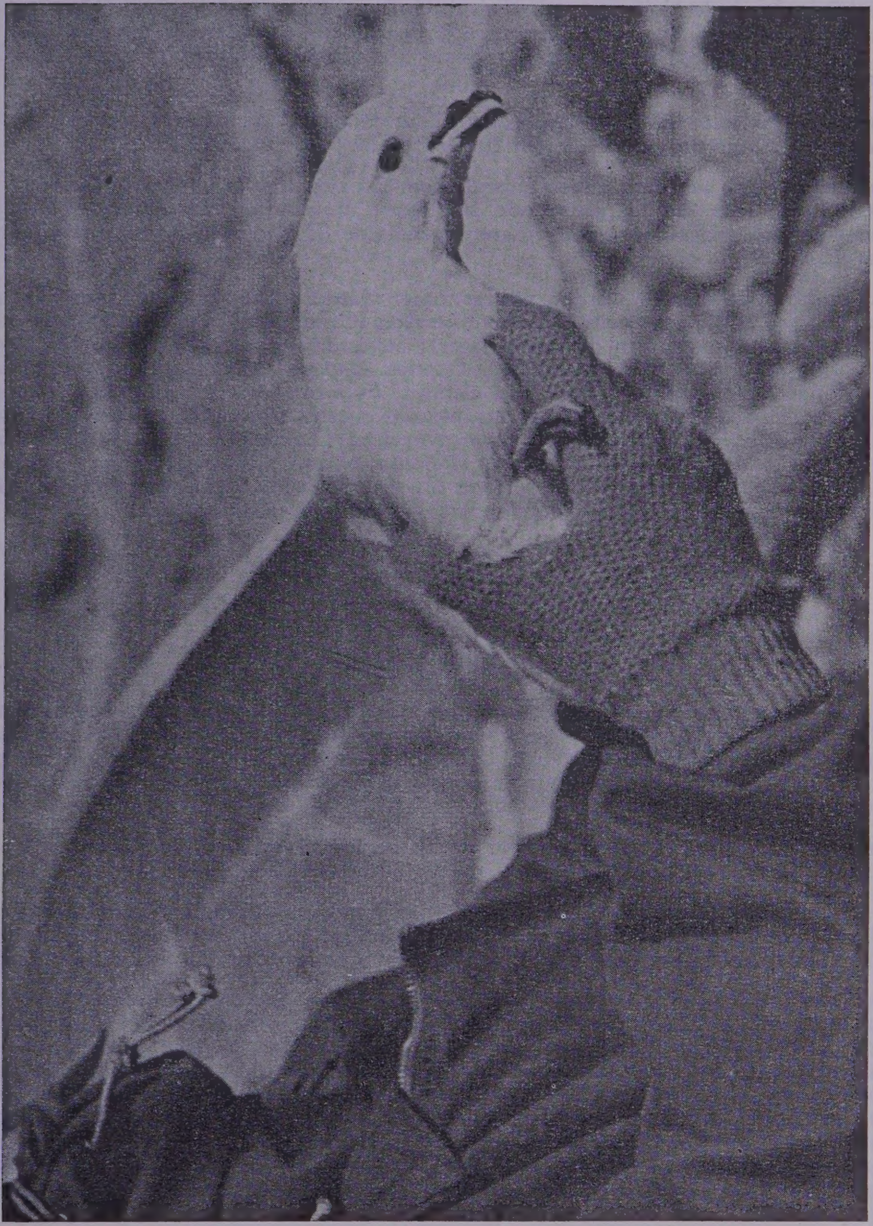
ALEXANDER, W. B. 1959, *Die Vögel der Meere* (Verlag P. Parey, Hamburg und Berlin. — AUTENBOER, T. VAN (1960). *Quelques aspects géographiques des Sör-Rondane. Terre de la Reine Maud. Antarctique* (La Géographie Gand, n$^{o}$ 3 sept. 1962, pp. 93 à 108). AUTENBOER, T.VAN. *Notes on the Geography and Geomorphology of the Sör—Rondane, Antarctica* (in press) — BOETTICHER, D$^{r}$ H, VON (1955). *Albatrosse und andere Sturmvögel* (Ziemsen Verlag — FISHER, J. and LOCKLEY, R. M. 1954, *Sea birds* (Collins, London). — PETERSON R.T., MOUNTFORT G. en HOLLON P.A.D. 1958, *Vogelgids* (Elsevier, Amsterdam, Brussel) Separatum Acta XI Congr. Int. Orn. (1954), p. 227, Bazel 21.XII.1955. *Oiseaux nidificateurs de la région de Pointe Geologie en 1952-1953.*

McCormick's Skua — *Stercorarius maccormicki.*

Photo T. Van Autenboer.

Snow Petrel — *Pagodroma nivea.*

Photo T. Van Autenboer.



*Pagodroma nivea* Gmelin.

Photo T. Van Autenboer.

## SAMENVATTING.

De auteur heeft deelgenomen aan een zeereis die begon in de zuid-oostelijke IJslandse wateren (65° NB) en liep over het gedeelte van de Noord-Atlantische Oceaan tot Noord-Schotland, de Noordzee, het Kanaal, Golf van Biscaye, Atlantische Oceaan langs de kortste weg naar Kaapstad om tenslotte de zuidelijke Oceaan te overkoepelen tot aan het Zuidpoolkontinent, nader bepaald de Koning Boudewijn-basis (70°20' S, 24°20' E).

Het eerste gedeelte tot aan IJsland gebeurde in de maand augustus 1958 en het tweede gedeelte tot Antarctica verliep vanaf november 1959 tot maart 1960.

De auteur heeft van deze zeereis gebruik gemaakt om nota te nemen van de verschillende vogelsoorten die hij gedurende zijn tocht ontmoette; het aantal exemplaren, de nauwkeurige geografische coördinaten evenals de data werden bij elke waarneming medegedeeld.

Volgende vogelsoorten werden waargenomen: *Larus fuscus* (Kleine Mantelmeeuw); *Rissa tridactyla* (Drieteenmeeuw); *Stercorarius skua* (Grote Jager); *Stercorarius maccormicki* (zuidelijke tegenhanger van de Grote Jager); *Stercorarius pomarinus* (Middelste Jager); *Stercorarius parasiticus* (Kleine Jager); *Daption Capensis* (Kaapse Duif); *Pagodroma nivea* (Sneeuwstormvogel); *Pagophila eburnea* (Ivoormeeuw); *Thallassoïca antarctica* (Zuidelijke stormvogel); *Macronectes giganteus* (Reuzenstormvogel); *Halobena caerulea; Pachyptila vittata; Hydrobates pelagicus* (Stormvogeltje); *Oceanites oceanicus* (Wilsons stormvogeltje); *Thallassarche cauta atlantica; Diomeda exulans* (Reuzenalbatros); *Phoebetria fusca; Sula bassana* (Jan van Gent); *Morus capensis; Spheniscus demersus; Puffinus bühlii; Pterodroma; Fregetta; Priocella antarctica* en *Thallassarche melanophris.*

R. F. V.

## RESUME.

L'auteur a participé à un voyage maritime qui débuta dans les eaux sud-orientales de l'Islande (65° latitude Nord), se poursuivit sur la partie septentrionale de l'Océan Atlantique jusqu'en Ecosse du Nord, la mer du Nord, le golfe de Biscaye, par le plus petit parcours de l'Océan Atlantique jusqu'au Cap, pour rejoindre enfin l'Océan Austral jusqu'au Pôle Sud, à la base Roi-Baudouin (70°20' S., 24°20' E.).

La première partie du voyage, jusqu'en Islande, se passa au mois d'août 1958 et la deuxième, jusqu'à l'Antarctique, dura de novembre 1959 à mars 1960.

L'auteur a profité de ce voyage en mer pour noter les différentes espèces d'oiseaux qu'il rencontra au cours de son périple; le nombre d'exemplaires, les coordonnées géographiques précises ainsi que les dates sont communiquées pour chaque observation.

Les espèces d'oiseaux suivantes ont été observées: *Larus fuscus* (Goéland brun); *Rissa tridactyla* (Mouette tridactyle); *Stercorarius skua* (Grand Labbe); *Stercorarius maccormicki* (pendant méridional du Grand Labbe); *Stercorarius pomarinus* (Labbe pomarin); *Stercorarius parasiticus* (Labbe parasite); *Daption capensis* (Pigeon du Cap); *Pagodroma nivea; Pagophila eburnea* (Goéland sénateur); *Thallassoïca antarctica; Macronectes giganteus; Halobena caerulea; Pachyptila vittata; Hydrobates pelagicus* (Pétrel tempête); *Oceanites oceanicus* (Pétrel océanite); *Thallassarche cauta atlantica; Diomeda exulans; Phoebetria fusca; Sula bassana* (Fou de Bassan); *Morus capensis; Spheniscus demersus; Puffinus bühlii; Pterodroma; Fregetta; Priocella antarctica* et *Thallassarche melanophris.*

R. F. V.

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